fast forward

Volume Five
Number One
◆
May 1993
◆
Audio-Visual
Department
◆
Concordia
University

"What is this MITE AVISTA and why should I support it?"

M ultimedia
I nteractive
T echnology
E nvironment

Because ..... the **MITE *AMIGA* Computer Lab**, in spite of inadequate funding, has been, and still is providing the technology and space for which some universities spend millions. That is, the hardware and software for 3D animation, for digitizing and creative processing of both image and sound, and for the learning and practise of new media technology principles. (see **Campus Computing**, *Computer Graphics World*, Nov.'93)

And what is more, here at **MITE AVISTA**, this learning is not only for the select few, but for students and faculty from any academic discipline, who are willing to put in the time and effort. Award-winning work created in the lab by students has brought credit to Concordia.

Concordia is one of the few universities offering **3D Animation** as an academic course. Students have waited two years to take this 3D intro course (**FMAN 326**). Some of them are already being offered opportunities to try out for jobs in the industry. At the *AMIGA* Computer Lab at the California Institute of Art, Computer Animation, using this same ***IMAGINE*** software, is a required course. The principles learned are transferable. You can go from a 3D interface on an ***AMIGA*** to a high-end **Silicon Graphics** machine. The logical progression is to acquire enough high-end machines to enable the teaching of advanced 3D animation.

Students, both internal and external, are continually asking for 3D animation courses. New media skill requirements go beyond text, tables and preset pie charts to digital manipulation of image and sound.

DeskTop Video is another major focus of **MITE AVISTA**. Computer assisted technology is now deeply entrenched in video production. The **NewTek VideoToaster** (see hardware description) is the only piece of technology identified by name in the recently published ***New Media, New Choices***. (Canadian Dept. of Communication, Cat. No. Co22-123/1992)

This publication states: "*We must, as a nation, develop the skills which a new media society will require. These skills will be essential in all walks of life, not simply those at the core of the media information sector.*" (p.39)

High schools are purchasing Toasters and looking to Concordia for instruction on how to use them. **Dawson College** has ten - **MITE** has one, which is overbooked and unable to meet the demand from all disciplines.

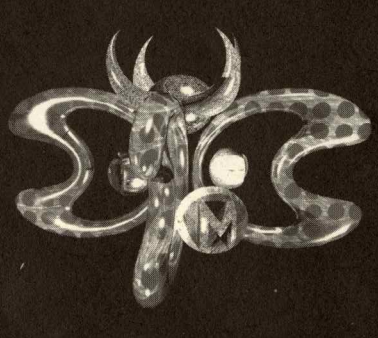
In the nineties, given the plethora of highly competitive digital media technology, there are two key factors for the successful operation of educational multimedia laboratories. These are **interdisciplinary access** and **cooperative funding**. The former we have, the latter we still need to expand, network and upgrade this already successful multimedia interactive technology environment that is the envy of more than a few institutions, nationally and internationally.

The world after university, powered by the engine of the super-symbolic economy, needs Canadian graduates who understand what new multimedia communication technology is all about, and who will use it to define economically productive roles for themselves. **HBW**

MITE is Multimedia ◆ Real Education for the Virtual World

DPaint IV ◆ Scott Prentice

DigiPaint ◆ Sara Morley



3D Imagine ◆ Scott Ross Bell

what's inside

- summer and fall workshops at the MITE Computer Lab
- list of MITE AVISTA's audio, video & computer facilities
- hardware & software acquisitions
- *WISH* Seminars for media instructors
- MITE news & views

MITE

Concordia University's Multimedia AMIGA Computer Lab

Since 1989, the **MITE Lab** has been a visually interactive teaching and learning environment.

It is configured with nine ***AMIGA 3000*** computers outputting to a nine monitor **media wall**, and four additional ***AMIGA*** workstations.

Paint Programs & Image Creation

- DCTV Paint
- DPaint IV
- DigiPaint
- Toaster Paint

Animation

2D ◆ Deluxe Paint IV

3D ◆ Imagine
◆ Lightwave 3D
◆ VistaPro

Desktop Publishing

- Art Expression
- ProDraw
- Pagestream
- ProPage

Image Processing & File Format Conversions

- Art Dept. Professional
- ImageFX

Sound Sampling, Sequencing & Digitizing

- Audio Master
- Bars & Pipes (MIDI)
- Sonix

Authoring Systems

- AmigaVision
- Cando
- Mandala

Computer Aided Design & Drafting

- DynaCADD

Spreadsheet

- Charts & Graphs
- ProCalc

24-bit Framegrabber & Toaster Paint ◆ **George Liem**

Software & Hardware Acquisitions

EPSON 300C Scanner was acquired last June, and has been in constant use. Full colour or grey scale scannning, up to 256 graduation tones per pixel per colour, 19 scanning resolutions from 50-600 dots per inch. Images can be scanned in 24-bit colour and processed and saved in nearly any file format using **ASDG's Art Department Professional** and/or **GVP's ImageFX.** These are both elegant and powerful tools for creative image processing.

OCR (Optical Character Recognition) software is also available. It allows for the scanning of text into the computer to save needless re-typing.

NEWTEK's Video Toaster

For those who still don't know, it's a video production studio on a board that is inserted into the ***AMIGA*** computer. What exactly does this board do?
It provides a switcher with 200 transition effects, a Character Generator for titles and credits, ChromaFx, a 24-bit Paint program, Lightwave 3D, Framegrabber, Genlock and Frame Buffers. They are in use professionally in many cable and broadcasting studios.
For example, **AVD**'s television **Studio A** uses the **Video Toaster** for its broadcast functions.

GVP'S ImpactVision-24

This is the first ***AMIGA*** video graphics card with flicker free 24-bit RGB graphics. It has an RGB Frame Grabber, Picture in Picture (PIP), Analog and Digital RGB Genlock and much more. Its comes bundled with Macro Paint 24, Caligari 3D, and Scala's video transitions and titling.

MITE is awaiting upgrades to the **IV24** System, **Desktop Darkroom**, which will turn the **IV24** into a powerful easy to use image capturer and processing system, and **MyLAD *(My Live Action Director)*** which will perform a wide variety of real time video wipe transitions between two video sources.

MANDALA® Virtual World Authoring System

Everybody is talking about ***virtual reality***, the solo trip with helmet and glove. **MANDALA** is the only computer software program with which you can program your cyberspace and enter into it with someone else. Others are able to watch your interaction. This software has been developed by Canadians, Toronto inventor **Vincent John Vincent** and programmer **Francis MacDougal** of the **Vivid Group**.

DCTV

It's a lot of things. It is a framegrabber, a pseudo 24-bit device, that is capable of displaying 2 to 4 million colours on a NTSC screen. It can be used to compile and playback animations in near real time. It is also a 24-bit paint program. By the way, did you know that 24-bit means 16.7 million colours?

MITE MISSION

The mission of the **M**ultimedia **I**nteractive **T**echnology **E**nvironment is to explore the links between education and the new media technology, and provide an environment where appropriate choices of tools can be made to match the task. Where user and use, tool and grasp, task and technology, co-operate, co-adapt and co-evolve in rich interaction. Where dynamic, self-motivated students and faculty can acquire skills and knowledge to participate in this confusing media-mangled super-symbolic economy with confidence and creative integrity.

What is Media Technology?

"Media technology embraces all of the technical inventions through which people communicate meaning and feeling, using sight, sound and mental imagery. It includes print, photography, movies, radio and television. Most importantly, it includes computers.

Computers are media, and will change the common metaphor of passive and mass communication to personalized and interactive systems, whose intelligence makes them individualized and creative extensions of the mind."

The Massachusetts Institute of Technology Media Lab Proposal, January, 1984.

Frames from the CFCF *Pulse News* story on the MITE Lab

WISH you knew more about Media Technology?

WISH Seminars

Weekend Intensive Software Hardware

These seminars were designed for media instructors and audio-visual personnel in education to explore ways of integrating relevant, affordable media technology with long term potential in the design of student workstations. The following topics were defined by the **MITE** staff as crucial to building a multimedia knowledge base.

1. **Computer Operating Systems**
2. **Paint Programs & Image Creation**
3. **2D Animation & Morphing**
4. **Desktop Publishing**
5. **Sound Sampling & Sequencing**
6. **Authoring Systems**
7. **Telecommunications**
8. **Desktop Video Options**

On March 19th and 20th, 1993, 10h-21h, eight participants from schools in the Montreal and Quebec City areas, subjected themselves to total media technology immersion.

Notable quotes from the participants:

"My brain hurts!"

"I had no idea you could do all this with an AMIGA!"

"I enjoyed the hands-on experience, rather than just watching and listening, but definitely just a beginning."

"Intense and fast and a wonderful place to find out and learn about options available."

What made the ***WISH* Seminars** possible was the quality of the knowledge shared by the instructors and teaching assistants. These were **Sal Barrera**, **Stefan Buchholz**, **Danielle Comeau**, **Marc Elias**, **Martin Helie**, **Sara Morley**, **Scott Prentice**, and **Emru Townsend**.

More ***WISH* Seminars** are planned for the Fall Term. Unless otherwise stated, these will take place on the fourth Friday of every month. During these days, the **MITE Lab** will be closed to regular users.

For more information: **Helen Bambic-Workman 848-3461**

MITE (pronounced *mighty*) NEWS

New Library Opening Festivities

In honour of the new library, **MITE AVISTA** acquired the ***Virtual Environment*** program called ***MANDALA*** (with help from AVD R&D and Education). On **September 21st, 22nd, 23rd *MANDALA*** was set up for the internal university community. On **October 31st**, the public interacted with ***MANDALA*** during Library festivities, with special programming by Sara Morley of Halloween virtual scenes and sounds. Also up and running was Danielle Comeau's **AIDS Interactive Pilot Module**, ***NEEDLES & HIV***.

Where have all the computers gone?

This was the mournful lament when in September nine of the **A2000** computers that had been on loan from Commodore for three years had to be returned. To fulfill the **MITE** commitment to the **ISC** and the **Cinema Animation Computer Course (FMAN326)**, **MITE** borrowed $16,000 to purchase six ***AMIGA3000*** computers in order to provide sufficient speed and memory for 3D animation.

ISC Conference

On October 30th, 31st, November 1st & 2nd, 1993, the **MITE** Lab hosted the **ISC's (International Sculpture Center)** four day **3D Animation Workshop for Sculptors**. This was the first ISC Conference held outside the USA. The selection of Concordia was influenced by the accelerated ***AMIGA*** computers and **3D *Imagine*** software package available. There were nine participants, from as far away as B.C. and Utah.

PULSE News story on the MITE Lab

For 3 minutes at 18h on December 23rd, 1992, **CFCF**'s **Marilyn Weston** reported on Concordia's **MITE Video Lab** and new multimedia technology. (copy available on request)

AMAZING COMPUTING Magazine

The **March '93** issue had a 3 page, 2000 word article, with graphics, about **MITE AVISTA**. The cover page headline reads - ***Concordia University's Video Lab***. This positive publicity about Concordia has generated a good deal of response from the United States and Canada.

MITE STATS

In addition to scheduled courses, class demos and orientation tours, over 10 weeks of this term there were 469 **MITE** booked users and 381 **AVISTA** booked users, for a total of 850 clients. With a conservative estimate of an additional 20% walk-ins, the total is 1020. In a 30 week school year, this is an estimated **3060 users/year**; up from 2400 in 1992.

EXTRA! EXTRA!
NEWS BULLETIN

Five **MITE Cinema Animation students** have just been accepted into a 10 month 3D Animation software training program with **TAARNA Systems' TFX Animation Inc**. They will be working on high-end **Silicon Graphics** machines, using the **TAARNA** Animation software system. Most of these students had never touched a computer before their introductory 3 credit animation course. Congratulations to **Steve Menzies**, Instructor, **FMAN326**.

Image Digitizing

Scanners:

- Epson 300C (8.5" x 11" • 600 d.p.i.• colour)
- Sharp JX-100 (5" x 7" • 200 d.p.i.• colour)

Framegrabbers:

- DCTV
- PP&S Framegrabber
- Video Toaster

Genlocks

GVP IV 24-bit Board

Chroma Keyer

NewTek's Video Toaster

Mandala® Virtual Environment

Ceiling-mounted RGB/NTSC Video Projector

44 Megabyte SyQuest Removable Hard Drives

MITE Computer Lab Bookings

Due to the extensive variety of available hardware and software, ***reservations are made in person.***

◆◆◆ ACKNOWLEDGEMENT ◆◆◆

The **MITE AVISTA** staff sincerely thanks the **AVD Technical Division** for their quick & inventive solutions that go beyond the maintenance & repair of equipment.

CBC TV• ROAD MOVIES

13 week ½ hour television series

Maureen Bradley, Communication Studies Graduate and former **MITE** staff member, was one of the eight videographers selected last summer by **CBC** from hundreds of young Canadians to participate in ***Road Movies***. Video stories from each of the participants were aired, as they visited different communities across Canada.

◆◆◆ *PLEASE POST* ◆◆◆

MITE Workshops • Summer 1993

Concordia University's Multimedia AMIGA Computer Lab

HOURS:	10h-17h	10h-20h	10h-17h
week of:	TUESDAY	WEDNESDAY	THURSDAY
May 25-27, June 22-23, July 20-22.		MITE Morph 10h30-12h30 Hi8 Editing Demo 12h30-14h Video Toaster Demo 18h30-20h	Mandala 12h-14h
June 1-3, June 29-30, July 27-29.		MITE Morph 10h30-12h30 Hi8 Editing Demo 12h30-14h Video Titles 18h30-20h	Mandala 12h-14h
June 8-10, July 6-8.		MITE Morph 10h30-12h30 Hi8 Editing Demo 12h30-14h Sound Sampling 18h30-20h	Mandala 12h-14h
June 15-17, July 13-15.		MITE Morph 10h30-12h30 Hi8 Editing Demo 12h30-14h Authoring Systems 18h30-20h	Mandala 12h-14h

Demos: $5 for Concordia students, staff & faculty • $14 for outside students • $30 for others

Hi8 Editing Demo

A general introduction to video editing on the ***SONY EVO 9700*** Hi8 Editor

Video Toaster Demo

The all-in-one broadcast studio:

switcher - 200 video effects, character generator, chromaFX, framegrabber, luminance keyer, 24-bit paint programme

Hands-On Workshops: $7 for Concordia students, staff & faculty • $16 for outside students • $32 for others

MITE Morph (includes an Introduction to the MITE Lab)

Framegrabber: image digitizing from a live video source
Deluxe Paint IV: painting, 2D animation & Morphing

Video Tiltes

Broadcast Titler II: creating video titles using various fonts, colours, backgrounds & transitional effects - incl. rolling credits, crawling lines of text, etc.

Sound Sampling & Sequencing

Audio Master III: digitizing sound from cassette & CD
Editing, looping & sequencing the sound wave on the AMIGA

Authoring Systems

AmigaVision: combining images & animations from ***Deluxe Paint IV*** and sound samples from ***Audio Master III*** to create an interactive sequence.

Experience Mandala's Virtual Environment • Thursdays 12h-14h

MITE AVISTA H-333 • Audio-Visual Department • Concordia University
1455 de Maisonneuve Blvd. W., Montreal, Quebec H3G 1M8 Canada • vox: (514) 848-3461 • fax: (514) 848-3441

◆◆◆ *PLEASE POST* ◆◆◆

MITE Workshops • Fall 1993

Concordia University's Multimedia AMIGA Computer Lab

HOURS:	13h-21h	10h-21h	10h-21h	10h-21h	10h-14h
week of:	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Sept. 20-24, Oct. 18-22, Nov. 15-19.			MITE Morph 10h30-12h30 Hi8 Editing Demo 12h30-14h Video Toaster Demo 18h30-20h	FMAN 326 3D Animation class 8h45-12h45	Mandala 12h-14h
Sept. 27-1, Oct. 25-29, Nov. 22-26.			MITE Morph 10h30-12h30 Hi8 Editing Demo 12h30-14h Video Titles 18h30-20h	FMAN 326 3D Animation class 8h45-12h45	Mandala 12h-14h
Oct. 4-8, Nov. 1-5, Nov. 29-3.			MITE Morph 10h30-12h30 Hi8 Editing Demo 12h30-14h Sound Sampling 18h30-20h	FMAN 326 3D Animation class 8h45-12h45	Mandala 12h-14h
Oct. 11-15, Nov. 8-12, Dec. 6-10.			MITE Morph 10h30-12h30 Hi8 Editing Demo 12h30-14h Authoring Systems 18h30-20h	FMAN 326 3D Animation class 8h45-12h45	Mandala 12h-14h

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AVISTA

Audio-Visual In-Service Teaching Area

Video

Transferring: ◆ VHS, Video8, Beta
Editing: ◆ Video8, Hi8

Audio

- Audio cassette dubbing (high speed)
- Audio cassette 4 track recording
- CD sound effects library, series 1000 & 2000
- DAT (digital audio tape)
- Sound booth recording

Slides

- Reprovit copy stand
  -create 35mm slides from 2D artwork
- Slide duplicator
  -duplicate 35mm slides
- Slide/tape synchronization
- Light table

Canon Laser Copier (b+w)

text, images & slides

paper: ◆ 8.5" x 11", 8.5" x 14", 11" x 17"
acetate: ◆ 8.5" x 11"

Computer Printouts

QMS-PS810:
- ◆ postscript
- ◆ 300 d.p.i.
- ◆ black + white

HP Paint Jet:
- ◆ ink jet
- ◆ colour

Dry Mounting & Lamination

For information call: ***GRAPHICS*** **848-3457**

AVISTA Booking

Reserve a week ahead at
AV BOOKINGS **848-3444 (H-341)**
for video, audio & slide-making facilities.

Editor: Helen Bambic-Workman
Design: Sara Morley
Produced at MITE AVISTA on an *AMIGA 3000*

MITE AVISTA

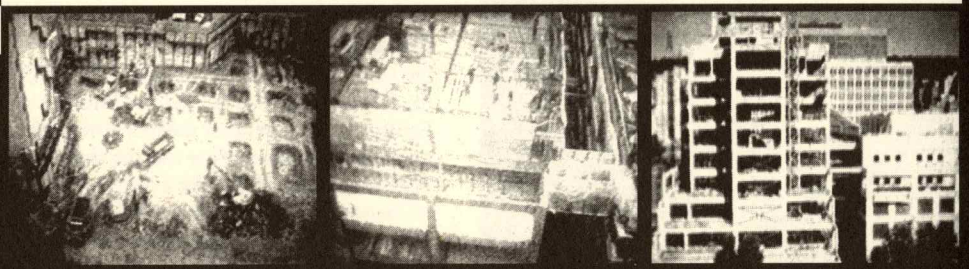
Hall Building ◆ H-333 ◆ 848-3461

Concordia UNIVERSITY

Audio-Visual Department ◆ 1455 de Maisonneuve Blvd. W.
Montreal, Quebec H3G 1M8 Canada ◆ Vox: (514) 848-3461 Fax: (514) 848-3441

Hours of Operation

SUMMER TERM 1993		FALL TERM	
May 11 - July 29		Sept.13 - Dec.17	
Tuesday	10h-17h	Monday	13h-21h
Wednesday	10h-20h	Tues.-Thurs.	10h-21h
Thursday	10h-17h	Friday	10h-14h



10 Years in 10 Minutes ◆ executive producer: Elizabeth Morey ◆ montage: Scott Prentice

10 Years in 10 Minutes

Ten Years in Ten Minutes was commissioned by **Elizabeth Morey**, Director of Special Projects, to celebrate the opening of the new library building. The video combines archival footage and **Nick Ostopkevich**'s facinating Super 8mm film timelapse footage covering five years of library construction.

Much of the timelapse film footage was not usable due to weather conditions. Nonetheless, **Peter Blyszczak** and I spent a long time transferring it all to video tape using the cameras in **Studio A**.

Because the original footage was typically grainy, a digital grab of each good frame, compiled in a digital medium, would have been the best way to avoid further degeneration. Laserdisc recording would have given the highest quality recording and playback, but the high cost was beyond budget contraints. As a less expensive alternative, I began to work with **DCTV**, which is a pseudo 24-bit framegrabber for the ***AMIGA***. It gave me a lot of control over the image and the ability to compile each image into an animation file that could be run from the harddrive. As over 40,000 individual frames of film were used, the grabbing of every single frame, modifying it and storing it to the harddrive was too painstaking and time-consuming a task.

I finally settled on leasing the **M2** editing system, which is a very robust and high quality recording medium. Instead of picking and choosing only the best frames, I set myself to the task of weeding out blocks of unusable ones. Though I wound up with almost ten times the footage I needed, this turned out to be a real plus. As I grew to trust the M2's resilience, it occured to me that I could condense the footage and increase the image clarity by playing the master back at double speed and re-recording it. I did this three times for the final result.

The rest was pretty straightforward production, contextualizing the final cut with the addition of archival footage, and effects and titles on the **Video Toaster**. The lively original soundtrack was composed and performed by **MITE**'s own **Ian Thomson**, using **KORG T3** and **Wave Station** keyboards.

The ***10 Years in 10 Minutes*** video is actually five minutes in length, and copies can be purchased through the **MITE** Lab for **$20.00**.

Scott Prentice